

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of transmitting data rate control (DRC) information to an access network (AN) transmitting packet data for a first transmission period having a plurality of slots in order to request a data rate for packet data to be transmitted by the AN for a second transmission period after the first transmission period in an access terminal (AT) of a mobile telecommunication system, comprising the steps of:

receiving a DRC request indicator (DRI) bit in at least one predetermined slot before a last slot of the first transmission period; and

generating the DRC information in response to the DRI bit and transmitting the DRC information to the AN,

wherein the DRI bit indicates if the DRC information is required.

2. (Previously Presented) The method of claim 1, wherein the at least one predetermined slot is the second slot from the last slot.

3. (Previously Presented) The method of claim 2, wherein the at least one predetermined slot are the first two slots from the last slot and the last slot.

4. (Currently Amended) An access terminal (AT) for transmitting data rate control (DRC) information to an access network (AN) transmitting packet data for a first transmission period having a plurality of slots according to a requested data rate in order to request a data rate for packet data to be transmitted by the AN for a second transmission period after the first transmission period in a mobile telecommunication system, comprising:

a receiver for receiving a DRC request indicator (DRI) bit in at least one predetermined slot before a last slot of the first transmission period; and

a transmitter for selectively transmitting the DRC information according to the DRI bit to the AN,

wherein the DRI bit indicates if the DRC information is required.

5. (Previously Presented) The AT of claim 4, wherein the at least one predetermined slot is the second slot from the last slot.

6. (Previously Presented) The AT of claim 4, wherein the at least one predetermined slot indicates the first two slots from the last slot and the last slot.

7. (Original) The AT of claim 4, wherein the transmitter comprises a selector for receiving the DRC information and selectively outputting the DRC information according to the DRI bit, and a spreader for spreading the output of the selector with a predetermined orthogonal code.

8. (Currently Amended) A method of controlling transmission of data rate control (DRC) information from an access terminal (AT) that requests a data rate for packet data in an access network (AN) that transmits the packet data at the requested data rate in a mobile telecommunication system, comprising the steps of:

checking a last slot of a first transmission period having a plurality of slots when the AN transmits the packet data to the AT for the first transmission period; and

transmitting a DRC request indicator (DRI) bit to the AT in at least one predetermined slot before the last slot to request DRC information to be used for a second transmission period after the first transmission period to the AT,

wherein the DRI bit indicates if the DRC information is required.

9. (Previously Presented) The method of claim 8, wherein the at least one predetermined slot is the second slot from the last slot.

10. (Previously Presented) The method of claim 8, wherein the at least one predetermined slot indicates the first two slots from the last slot and the last slot.

11. (Currently Amended) An access network (AN) for transmitting packet data at a requested data rate to an access terminal (AT) and controlling transmission of DRC information

from the AT that requests the data rate for the packet data in a mobile telecommunication system, comprising:

a controller for determining a last slot of a first transmission period having a plurality of slots when the AN transmits the packet data to the AT for the first transmission period; and

a transmitter for transmitting a DRC request indicator (DRI) bit to the AT in at least one predetermined slot before the last slot to request DRC information to be used for a second transmission period after the first transmission period to the AT,

wherein the DRI bit indicates if the DRC information is required.

12. (Previously Presented) The AN of claim 11, wherein the at least one predetermined slot is the second slot from the last slot.

13. (Previously Presented) The AN of claim 11, wherein the at least one predetermined slot indicates the first two slots from the last slot and the last slot.

14. (Original) The AN of claim 11, further comprising a spreader for spreading the DRI bit with a predetermined orthogonal code.

15. (Currently Amended) A mobile telecommunication system comprising:

an access network (AN) for transmitting packet data for a first transmission period having a plurality of slots according to a requested data rate and transmitting a DRC request indicator (DRI) bit in at least one predetermined slot before a last slot of the first transmission period; and

an access terminal (AT) for selectively transmitting data rate control (DRC) information to the AN according to the DRI bit to request a data rate for packet data to be received for a second transmission period after the first transmission period,

wherein the DRI bit indicates if the DRC information is required.

16. (Original) The mobile telecommunication system of claim 15, wherein the AT comprises a receiver for receiving the DRI bit from the AN and a transmitter for selectively transmitting the DRC information to the AN according to the DRI bit.

17. (Original) The mobile telecommunication system of claim 16, wherein the transmitter comprises a selector for receiving the DRC information and selectively outputting the DRC information according to the DRI bit, and a spreader for spreading the output of the selector with a predetermined orthogonal code.

18. (Original) The mobile telecommunication system of claim 15, wherein the AN comprises a controller for checking the last slot of the first transmission period when the AN transmits the packet data to the AT for the first transmission period, and a transmitter for transmitting the DRI bit to the AT.

19. (Original) The mobile telecommunication system of claim 18, wherein the transmitter includes a spreader for spreading the DRI bit with a predetermined orthogonal code.

20. (Previously Presented) The mobile telecommunication system of claim 15, wherein the at least one predetermined slot is the second slot from the last slot.

21. (Previously Presented) The mobile telecommunication system of claim 15, wherein the at least one predetermined slot indicates the first two slots from the last slot and the last slot.

22. (Previously Presented) A method of transmitting data rate control (DRC) information to an access network (AN) in an access terminal (AT) of a second group in a mobile telecommunication system having the AN for transmitting packet data at a requested data rate for a first transmission period having a plurality of slots, and a plurality of ATs divided into a first AT group that includes at least one AT for receiving the packet data for the first transmission period and a second AT group that does not receive the packet data for the first transmission period and is to receive packet data for a second transmission period after the first transmission period, the method comprising the steps of:

detecting ATs of the first group by multiplying a received preamble by a plurality of predetermined orthogonal codes assigned to the plurality of ATs;

detecting the length of the packet data transmitted to the first group of ATs for the first transmission period from the preamble and determining a last slot of the first transmission period; and

generating the DRC information of the AT of the second group in at least one predetermined slot before the last slot and transmitting the DRC information to the AN, said at least one predetermined slot located after the packet data of the first transmission period of the first group.

23. (Previously Presented) The method of claim 22, wherein the at least one predetermined slot is the second slot from the last slot.

24. (Previously Presented) The method of claim 22, wherein the at least one predetermined slot indicates the first two slots from the last slot and the last slot.

25. (Previously Presented) An access terminal (AT) of a second group for transmitting data rate control (DRC) information to an access network (AN) in a mobile telecommunication system having the AN for transmitting packet data at a requested data rate for a first transmission period having a plurality of slots, and a plurality of ATs divided into a first AT group that includes at least one AT for receiving the packet data for the first transmission period and a second AT group that does not receive the packet data for the first transmission period and is to receive packet data for a second transmission period after the first transmission period, comprising:

a multiplier for detecting ATs of the first group by multiplying a received preamble by a plurality of predetermined orthogonal codes assigned to the plurality of ATs;

a packet length detector for detecting the length of the packet data transmitted to the first group of ATs for the first transmission period from the preamble;

a controller for determining a last slot of the first transmission period; and

a transmitter for selectively transmitting the DRC information of the AT of the second group in at least one predetermined slot before the last slot to the AN under the control of the controller, said at least one predetermined slot located after the packet data of the first

transmission period.

26. (Previously Presented) The AT of claim 25, wherein the at least one predetermined slot is the second slot from the last slot.

27. (Previously Presented) The AT of claim 25, wherein the at least one predetermined slot indicates the first two slots from the last slot and the last slot.

28. (Original) The AT of claim 25, further comprising an accumulator for accumulating the multiplication result received from the multiplier and an energy detector for detecting an energy value corresponding to the accumulation result and feeding the energy value to the packet length detector.

29. (Original) The AT of claim 25, wherein the transmitter comprises a selector for receiving the DRC information and selectively outputting the DRC information under the control of the controller, and a spreader for spreading the output of the selector with a predetermined orthogonal code.

30. (Previously Presented) A method of transmitting data rate control (DRC) information to an access network (AN) in an access terminal (AT) of a first group in a mobile telecommunication system having the AN for transmitting packet data at a requested data rate for a first transmission period having a plurality of slots, and a plurality of ATs divided into the first AT group that includes at least one AT for receiving the packet data for the first transmission period and a second AT group that does not receive the packet data for the first transmission period and is to receive packet data for a second transmission period after the first transmission period, the method comprising the steps of:

determining a last slot of the first transmission period; and

generating the DRC information of the AT of the first group in at least one predetermined slot before the last slot and transmitting the DRC information to the AN, said at least one predetermined slot located after the packet data of the first transmission period.

31. (Previously Presented) The method of claim 30, wherein the at least one predetermined slot is the second slot from the last slot.

32. (Previously Presented) The method of claim 30, wherein the at least one predetermined slot indicates the first two slots from the last slot and the last slot.

33. (Previously Presented) An access terminal (AT) of a first group for transmitting data rate control (DRC) information to an access network (AN) in a mobile telecommunication system having the AN for transmitting packet data at a requested data rate for a first transmission period having a plurality of slots, and a plurality of ATs divided into the first AT group that includes at least one AT for receiving the packet data for the first transmission period and a second AT group that does not receive the packet data for the first transmission period and is to receive packet data for a second transmission period after the first transmission period, comprising:

- a preamble detector for detecting a preamble;
- a packet length detector for detecting the length of the packet data received for the first transmission period from the preamble;
- a controller for determining a last slot of the first transmission period based on the packet length; and
- a transmitter for selectively transmitting the DRC information of the AT of the first group in at least one predetermined slot before the last slot to the AN under the control of the controller, said at least one predetermined slot located after the packet data of the first transmission period.

34. (Previously Presented) The AT of claim 33, wherein the at least one predetermined slot is the second slot from the last slot.

35. (Previously Presented) The AT of claim 33, wherein the at least one predetermined slot indicates the first two slots from the last slot and the last slot.

36. (Original) The AT of claim 33, wherein the transmitter comprises a selector for receiving the DRC information and selectively outputting the DRC information under the control of the controller, and a spreader for spreading the output of the selector with a predetermined orthogonal code.

37. (Previously Presented) An access terminal (AT) in a mobile telecommunication system, comprising:

- a multiplier for sequentially multiplying a received preamble by a plurality of orthogonal codes assigned to a plurality of ATs;

- a detector for detecting an AT receiving packet data and the length of the packet data from the multiplication result;

- a controller for determining the termination period of packet data transmission based on the packet length; and

- a transmitter for selectively transmitting data rate control (DRC) information in a predetermined period to an access network (AN) before the termination period, said at least one predetermined period located after the packet data transmission.

38. (Previously Presented) The AT of claim 37, wherein if the transmission period includes a plurality of slots, the predetermined period is the second slot from a last slot.

39. (Original) The AT of claim 37, wherein if the transmission period includes a plurality of slots, the predetermined period indicates the first two slots from a last slot and the last slot.

40-42. (Cancelled)